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The UStitle Package*

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Abstract

The UStitle package redefine the standard title page of the LaTeX classes to add a logo at the to and an address line below the author.

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*This document corresponds to UStitle v1.0, dated 2005/05/17.

1 User Interface

1.1 Loading the **UStitle** packages

The UStitle package is loaded in the document preamble, for example:

    \usepackage[⟨key=value list⟩]{ustitle}

1.2 Options

The package input parameters are entered with key-values. The parameters, with default options and initial values are:

- `titlepage = [true], false`

  This option corresponds with the global LaTeX class option `titlepage`. Specifies whether a new page should be started after the document title or not. The article class does not start a new page by default, while report and book do. The default initial setup is `titlepage = false`.

- `BW        = [true], false`

  The option specifies whether the black and white or the color version of the logo is used. The default initial setup is `BW = false`.

- `logo      = none, plain, [top], stacked, left`

  Selection of the specific logo at the top of the title page:

	BW=false	BW=true
plain	USlogo	USlogo-BW
top	USlogo-top	USlogo-BW-top
stacked	USlogo-stack	USlogo-BW-stack
left	USlogo-left	USlogo-BW-left

- `scale     = [1.0]`

  Scale factor when logo graphics file is imported. The default initial setup is `scale = 1.0`.

- `vspace    = [0pt]`

  The logo can be shifted up or downwards with the amount `vspace`.

1.3   User macros

Only one command, `\address`, is provided in addition to the standard LaTeX title page commands, `\title`, `\author` and `\date`. As an example:

```
\documentclass[12pt,a4paper,UKenglish]{article}
\usepackage{babel}
\usepackage[bw]{ustitle}

\title  {A Beautiful Document}
\author {Danie Els \and John Doe}
\address{Department of Mechanical Engineering,\\
         University of Stellenbosch,\\
         Private Bag X1, Matieland, 7602.}
\date   {2005/05/17}

\begin{document}
   \maketitle
    :
```

2   Implementation: **UStitle**

2.1   Identification

```
1 ⟨∗pkg⟩
```

```
2 \NeedsTeXFormat{LaTeX2e}[1999/12/01]
```

```
3 \ProvidesPackage{ustitle}[\USTitleFileDate\space
4                           \USTitleFileVersion\space
5                           Stellenbosh Title Page Package (DNJ ELS)]
```

2.2   External packages

The following packages are required by UStitle.

```
6 \RequirePackage{ifthen}
7 \RequirePackage{keyval}
```

We do not load the graphicx package, but requests its loading in the document preamble to prevent global option conflicts.

```
8 \AtBeginDocument{%
9   \@ifpackageloaded{graphicx}{}{%
10     \PackageError{ustitle}{You must load the graphicx package}{}%
11     }}
```

2.3 Input options with **keyval**

2.3.1 Helper macros

`\UST@true`
`\UST@false` Define true and false test macros.

```
12 \def\UST@true{true}
13 \def\UST@false{false}
```

`\UST@boolkey`
`\UST@@boolkey` Define a boolean key `\UST@boolkey[`⟨*default*⟩`]{`⟨*Key*⟩`}{`⟨*test opt*⟩`}` that test if a key input is true or false.

```
14 \def\UST@boolkey{\@dblarg\UST@@boolkey}
```

```
15 \def\UST@@boolkey[#1]#2#3{%
16     \lowercase{\def\UST@tempa{#3}}%
17     \ifx\UST@tempa\@empty
18         \let\UST@tempa\UST@true
19     \fi
20     \ifx\UST@tempa\UST@true
21     \else
22         \ifx\UST@tempa\UST@false
23         \else
24             \let\UST@tempa\relax
25         \fi
26     \fi
27     \ifx\UST@tempa\relax
28         \PackageWarning{ustitle}{%
29             Unexpected value '#3'\MessageBreak
30             of option '#1' instead of\MessageBreak
31             'true' or 'false'}
32     \else
33         \csname UST@#2\UST@tempa\endcsname
34     \fi}
```

`\UST@processKVoptions` Process all key value options in the package parameter list, including global options.

```
35 \newcommand*{\UST@processKVoptions}[1]{%
36     \let\@tempa\@empty
37     \@for\CurrentOption:=\@classoptionslist\do{%
38         \@ifundefined{KV@#1@\CurrentOption}%
39             {}%
40             {\edef\@tempa{\@tempa,\CurrentOption,}}}%
41     \edef\@tempa{%
42         \noexpand\setkeys{#1}{\@tempa\@ptionlist{\@currname.\@currext}}}%
43     \@tempa
44     \AtEndOfPackage{\let\@unprocessedoptions\relax}}%
```

2.3.2 Key value: `titlepage`

```
45 \newif\ifUST@titlepage
46 \UST@titlepagefalse
```

```
47 \define@key{UST@KeyOpt}{titlepage}[true]{%
48     \UST@boolkey{titlepage}{#1}}
```

2.3.3 Key value: `BW` (Black and White)

4

```
49 \newif\ifUST@BW
50 \UST@BWfalse

51 \define@key{UST@KeyOpt}{BW}[true]{
52     \UST@boolkey{BW}{#1}%
53     \UST@SetUSLogo}
```

2.3.4 Key value: scale

```
54 \define@key{UST@KeyOpt}{scale}[1.0]{%
55     \def\UST@logoscale{#1}}
```

2.3.5 Key value: vspace

```
56 \def\UST@vspace{0pt}%
57 \define@key{UST@KeyOpt}{vspace}[0pt]{%
58     \def\UST@vspace{#1}}
```

2.3.6 Key value: logo

```
59 \newcounter{UST@logocnt}

60 \newif\ifUST@logo
61 \UST@logotrue

62 \define@key{UST@KeyOpt}{logo}[top]{%
63     \ifthenelse{\equal{#1}{none}}    {\UST@logofalse}              {%
64     \ifthenelse{\equal{#1}{plain}}   {\setcounter{UST@logocnt}{0}}{%
65     \ifthenelse{\equal{#1}{top}}     {\setcounter{UST@logocnt}{1}}{%
66     \ifthenelse{\equal{#1}{stacked}}{\setcounter{UST@logocnt}{2}}{%
67     \ifthenelse{\equal{#1}{left}}    {\setcounter{UST@logocnt}{3}}{%
68         \PackageWarning{ustitle}{logo='#1' is invalid, default to 'top'}%
69         \setcounter{UST@logocnt}{0}%
70         }}}}}%
71     \UST@SetUSLogo}
```

Logos are Scaled to give USLogo-top a width of 89.5mm

```
72 \def\UST@logoname{}%
73 \newlength\UST@logowdt

74 \newcommand\UST@SetUSLogo{%
75 \ifcase\c@UST@logocnt%...................... 0 plain
76     \ifUST@BW
77         \def\UST@logoname{USlogo-BW}%
78     \else
79         \def\UST@logoname{USlogo}%
80     \fi
81     \setlength\UST@logowdt{15.08mm}%
82 \or%...................................... 1 top
83     \ifUST@BW
84         \def\UST@logoname{USlogo-BW-top}%
85     \else
86         \def\UST@logoname{USlogo-top}%
87     \fi
88     \setlength\UST@logowdt{89.50mm}%
89 \or%...................................... 2 stacked
90     \ifUST@BW
91         \def\UST@logoname{USlogo-BW-stack}%
92     \else
93         \def\UST@logoname{USlogo-stack}%
```

```
 94      \fi
 95      \setlength\UST@logowdt{32.08mm}%
 96 \or%.................................... 3 left
 97        \ifUST@BW
 98            \def\UST@logoname{USlogo-BW-left}%
 99        \else
100            \def\UST@logoname{USlogo-left}%
101        \fi
102      \setlength\UST@logowdt{108.60mm}%
103 \fi}
104 \newcommand\UST@putlogo{%
105    \ifUST@logo
106      {\vspace*{\UST@vspace}%
107        \centering%
108        \makebox[0pt][c]{%
109            \includegraphics[width=\UST@logoscale\UST@logowdt]{\UST@logoname}}\par
110      }%
111    \fi
112 }
```

2.3.7   Set and process options

Set the default keys

```
113 \setkeys{UST@KeyOpt}{%
114    titlepage = false,
115         logo,
116             BW = false,
117         scale}
```

Process the options

```
118 \UST@processKVoptions{UST@KeyOpt}
```

2.4   Title Page

`\address`
`\@address`
```
119 \let\@address\relax
120 \newcommand\address[1]{\def\@address{#1}}
```

`\maketitle`   Redefine the standard LaTeX `\maketitle` command to include a logo and and
address.

```
121 \ifUST@titlepage
122      \renewcommand\maketitle{%
123      \begin{titlepage}%
124          \let\footnotesize\small
125          %\let\footnoterule\relax
126          \let \footnote \thanks
127          \null
128          \UST@putlogo
129          \vfil
130          \vskip 20mm
131          \begin{center}%
132            {\LARGE \@title \par}%
133             \vskip 10mm%
134             {\large
```

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```
135              \lineskip .75em%
136              \begin{tabular}[t]{c}%
137                  \@author
138              \end{tabular}\par}%
139              \ifx\@address\relax\else
140                  \vskip 10mm%
141                {\normalsize\@address\par}
142              \fi
143              \vskip 10mm%
144              {\large \@date \par}%          % Set date in \large size.
145          \end{center}\par
146              \vfil\null
147          \@thanks
148 %          \ifx\@address\relax
149 %              \vfil\null
150 %          \fi
151      \end{titlepage}%
152      \setcounter{footnote}{0}%
153      \global\let\thanks\relax
154      \global\let\maketitle\relax
155      \global\let\@thanks\@empty
156      \global\let\@author\@empty
157      \global\let\@date\@empty
158      \global\let\@title\@empty
159      \global\let\title\relax
160      \global\let\author\relax
161      \global\let\date\relax
162      \global\let\and\relax}
163 \else
164      \renewcommand\maketitle{%
165      \par
166      \begingroup
167          \renewcommand\thefootnote{\@fnsymbol\c@footnote}%
168          \def\@makefnmark{\rlap{\@textsuperscript{\normalfont\@thefnmark}}}%
169          \long\def\@makefntext##1{\parindent 1em\noindent
170                  \hb@xt@1.8em{%
171                      \hss\@textsuperscript{\normalfont\@thefnmark}}##1}%
172          \if@twocolumn
173          \ifnum \col@number=\@ne
174              \@maketitle
175          \else
176              \twocolumn[\@maketitle]%
177          \fi
178          \else
179          \newpage
180          \global\@topnum\z@   % Prevents figures from going at top of page.
181          \@maketitle
182          \fi
183          \thispagestyle{plain}\@thanks
184      \endgroup
185      \setcounter{footnote}{0}%
186      \global\let\thanks\relax
187      \global\let\maketitle\relax
188      \global\let\@maketitle\relax
```

```
189    \global\let\@thanks\@empty
190    \global\let\@author\@empty
191    \global\let\@date\@empty
192    \global\let\@title\@empty
193    \global\let\title\relax
194    \global\let\author\relax
195    \global\let\date\relax
196    \global\let\and\relax}
```

\@maketitle Redefine the standard LATEX \@maketitle command to include a logo and and address.

```
197 \def\@maketitle{%
198    \newpage
199    \null
200    \begin{center}%
201       \let \footnote \thanks
202       \UST@putlogo
203       \vskip 15mm%
204      {\LARGE \@title \par}%
205       \vskip 5mm%
206      {\large
207       \lineskip .5em%
208       \begin{tabular}[t]{c}%
209          \@author
210       \end{tabular}\par}%
211       \ifx\@address\relax\else
212          \vskip 10mm%
213         {\normalsize\@address\par}
214       \fi
215       \vskip 5mm%
216      {\large \@date}%
217    \end{center}%
218    \par
219    \vskip 5mm}
220 \fi
```

```
221 ⟨/pkg⟩
```

The end of this package.

Change History

v1.0
    General: Initial version   1